

## 03050109-170

(*Little Saluda River/Lake Murray*)

### General Description

Watershed 03050109-170 is located in Saluda County and consists primarily of the *Little Saluda River* and its tributaries from its origin to Lake Murray. The watershed occupies 144,144 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Herndon-Tatum-Helena-Georgeville series. The erodibility of the soil (K) averages 0.43, the highest in the Saluda River Basin, and the slope of the terrain averages 7%, with a range of 2-25%. Land use/land cover in the watershed includes: 64.1% forested land, 31.6% agricultural land, 1.4% water, 1.0% barren land, 1.0% urban land, and 0.9% forested wetland (swamp).

The Little Saluda River is formed by the confluence of Mine Creek (Little Mine Creek, Dry Creek) and Red Bank Creek (Penn Creek, Salem Branch) and flows through the Saluda Reservoir near the Town of Saluda. Further downstream, the Little Saluda River is joined by Canebrake Branch, Burnets Creek, and Richland Creek (Poplar Branch, Corley Branch). Big Creek (Dry Creek, Shiloh Branch, Persimmon Creek, Watermelon Branch) joins the Little Saluda River to form an arm of upper Lake Murray. Indian Creek and Dailey Creek flow into the Little Saluda River arm of Lake Murray forming small coves. There are a total of 247.6 stream miles and 2,313.5 acres of lake waters in this watershed, all classified FW. The western most corner of the watershed is within the Sumter National Forest.

### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-050	S/W	FW	LITTLE SALUDA RIVER AT US 378, E OF SALUDA
S-123	P/INT	FW	LITTLE SALUDA RIVER AT S-41-39, 5.2 MILES NE OF SALUDA
S-222	W/SPRP	FW	LAKE MURRAY, LITTLE SALUDA RIVER ARM AT SC 391

**Little Saluda River** - There are two SCDHEC monitoring sites along the Little Saluda River. At the upstream site (*S-050*), aquatic life uses are not supported due to dissolved oxygen excursions. There is a significant decreasing trend in pH. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, and total phosphorus concentration suggest improving conditions for these parameters. P,P'DDE, a metabolite of DDT, was detected in the 1998 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

At the downstream site (*S-123*), aquatic life uses are not supported due to dissolved oxygen excursions. There is a significant decreasing trend in pH at this site. A high concentration of copper was measured in the 1997 sediment sample. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus and total nitrogen concentrations suggest improving conditions for these

parameters. Recreational uses are fully supported, and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

***Little Saluda River Arm of Lake Murray (S-222)*** - Aquatic life uses are not supported due to pH and total phosphorus excursions. Recreational uses are fully supported.

### ***Natural Swimming Areas***

<b><i>FACILITY NAME</i></b>	<b><i>PERMIT #</i></b>
<b><i>RECEIVING STREAM</i></b>	<b><i>STATUS</i></b>
CAMP BARSTOW	41-N01
LITTLE SALUDA RIVER ARM OF LAKE MURRAY	ACTIVE

### **NPDES Program**

#### ***Active NPDES Facilities***

<b><i>RECEIVING STREAM</i></b>	<b><i>NPDES#</i></b>
<b><i>FACILITY NAME</i></b>	<b><i>TYPE</i></b>
<b><i>PERMITTED FLOW @ PIPE (MGD)</i></b>	<b><i>COMMENT</i></b>
LITTLE SALUDA RIVER	SC0022381
TOWN OF SALUDA	MINOR DOMESTIC
PIPE #: 001 FLOW: 0.465	

### **Growth Potential**

Growth for the Town of Saluda, found in the center of this watershed, is limited due to water and sewer constraints. A portion of the Town of Ward also resides in the watershed. Saluda County connected into the Edgefield County Water and Sewer Authority's Regional Sewer Collection System, which should provide more potential for future growth. U.S. Hwys 178 and 378 run through the watershed, and together with existing industry may encourage growth in this area.